



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/542,676

07/19/2005

William Hunter Symonds

41577/317731

1708

23370

7590

07/24/2008

JOHN S. PRATT, ESQ  
KILPATRICK STOCKTON, LLP  
1100 PEACHTREE STREET  
ATLANTA, GA 30309

EXAMINER

TURNER, SONJI LUCAS

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

07/24/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/542,676	<b>Applicant(s)</b> SYMONDS ET AL.	
	<b>Examiner</b> SONJI TURNER	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-14 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/29/2005</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of claim 1-12 in the reply filed on May 19, 2008 is acknowledged.

### ***Priority***

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy received on July 19, 2005 has been filed.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to include "Figure 3" as described in the specification at line 24 on page 12 and line 17 on page 14 and fail to show "Figure 2" as described in the specification at line 17 on page 14. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet"

or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, and 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Call ‘016 (US Patent 6,267,016). Call ‘016 discloses a particle collector with a cyclone; a housing; an inlet and outlet; an airflow means; a delivery means collecting fluid from a reservoir; and a means for heating the incoming air. The heating element disclosed in Call ‘016 is capable of heating the incoming air (col. 4, lines 10-68; col. 5, lines 30-42; col. 6, lines 19-40, 52-57; figs. 1-7). Regarding claim 7, “and/or” in line 2 of the claim has been interpreted as or.

Regarding claim 8, Call ‘016 teaches rigid container with a closure means (col. 4, lines 12-17; figs. 1-3).

Regarding claims 9-11, Call ‘016 teaches a ventilation means, a louver, and a blower (figs. 1-3; col.4, lines 24-45).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 1797

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Call '016. Call '016 discloses the apparatus essentially as claimed, supra. It would have been obvious to a person having ordinary skill in the art to provide the heating element disclosed in Call '016 at a location that would heat both the fluid from reservoir 38 and the ambient incoming air to prevent adverse effects from ambient temperature below the freezing point of the liquid in the reservoir (col. 6, lines 52-57; figs. 1-7).

Additionally, claims 7-11 are rejected under 35 U.S.C. 103(a) as previously stated above in Claim Rejections – 35 USC § 102.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1797

8. Claims 3-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Call '016 in view of Born '146 (US Patent 4,324,146). The teachings of Call '016 are disclosed above. Call '016 does not teach a heating means that is a heating block of one or more elements. Born '146 does teach a heating block of one or more elements that is thermostatically controlled and attached to the air inlet (figs. 1-2; col. 3, lines 54-68; col. 4, lines 5-15).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to use the thermostatically-controlled heaters of Born '146 to heat to the ambient air sample of Call '016 to maintain an optimal sampling temperature for the apparatus. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

9. Regarding claim 5, Born '146 is silent on the material of construction for the thermostatically-controlled heaters; however, metal and metal alloys are known to conduct heat and are well-known to be used as heat conductors. As such, providing a heating block of metal or metal alloy would have been obvious to a person of ordinary skill at the time the present invention was made.

10. Regarding claim 12, the teaching of Call '016 is disclosed above. Call '016 does not teach a second control means responsive to a sensing means for sensing temperature within the enclosure means. The teaching of Born '146 does disclose such means (col. 2, lines 34-44).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to use such means responsive for sensing temperature within the enclosure as taught by Born '146 to maintain an optimal temperature range within the enclosure of Call

Art Unit: 1797

'016. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and is listed on PTO-892 (Notice of References Cited). The references are considered to be of interest, as the references relate to the art of particle separation and analysis.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SONJI TURNER whose telephone number is (571)272-1203. The examiner can normally be reached on Monday - Friday, 10:00 am – 2:00 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

st  
7/3/2008

/Duane S. Smith/  
Supervisory Patent Examiner, Art Unit  
1797  
7-21-08

Application/Control Number: 10/542,676  
Art Unit: 1797

Page 7